

Chapter 5

A forgotten figure in Siouan and Caddoan linguistics: Samuel Stehman Haldeman (1812–1880)

Anthony Grant

In the light of Bob Rankin's Dhegiha work, this paper examines some of the earliest recorded material on Kanza and Osage, collected and transcribed by the naturalist Samuel Stehman Haldeman in an alphabet of his own devising (Haldeman 1859; 1860). Although his transcriptions fail to capture many crucial phonetic and phonemic distinctions, they are useful as records of earlier and more conservative forms of these languages.

1 Introduction

Robert Rankin's examinations of earlier sources on Native American languages which have rarely been the subject of fuller description impel us to look at the work of other early collectors of data on Siouan and Caddoan languages. We may mention for instance his paper on Max von Wied's (1839–1841) brief vocabulary of Kaw, Kanza or Kansa (Rankin 1994), Nor should we overlook his splendid salvage work on Kanza (the name I will use henceforth in this paper) and Quapaw, and his pivotal role in the organization of the Siouan-Caddoan Conferences.

One researcher is almost overlooked nowadays (despite a memoir by Lesley 1886 which hymns his activities while getting its dedicatee's name wrong). The naturalist, sawmill manager and avocational linguist Samuel Stehman Haldeman (1812–1880) was mostly known to the linguists in the 19th century for his 'Analytic Orthography' (Haldeman 1859, also produced in book form as Haldeman 1860). This was a prizewinning attempt to construct a universal phonetic alphabet, based on Latin letters (and following some precepts of classical Ciceronian Latin pronunciation, for instance <C> for /k/ and <V> for /w/) but enhanced with some created symbols. It also added a number of diacritics, for documenting



phonetic data in the world's languages, especially from previously undescribed languages of North America and elsewhere.

This work represented a determined effort to describe and notate sounds of speech, for which it was awarded the Trevyllian Prize in London against eighteen contenders. And there its reception ground to a halt. The alphabetic system, based on what Haldeman assumed were Classical Latin letter-values, was well-adapted to indicate certain aspects of vowel quality and quantity and basic consonantal distinctions. But his pioneering work is one of several such pre-International Phonetic Association schemes proposed in the 19th century, of which Lepsius (1863) is the most famous and influential, and it is cumbersome. Because it required a large number of special fonts and diacritics it was difficult to reproduce, with the result that nobody save Haldeman ever adopted it.

Haldeman's system is elaborate but just how successfully or consistently he applied his own transcriptional system is moot. For instance in his Chinese data (actually Cantonese), he fails to indicate any tones for the numerals for Guangzhou Cantonese, although he makes an effort to do so for the nearby Macanese variety of Cantonese. Haldeman uses the phonetic terminology of his time, with *surd*, *sonant*, *lenis*, *asper*, employed where modern phoneticians talk about *voiceless*, *voiced*, *unaspirated* and *aspirated* sounds, and with *sigmal*, *lingual*, *cerebral*, *guttural* and *faucal* used for modern *alveolar*, *dental*, *retroflex*, *velar* and *uvular* respectively. He also talks about "pure" (non-nasalized) and nasal sounds, and arrays consonants according to their degree of "interruption" (plosives are the most "interrupted" consonants in this scheme); see Figure 1. He also divided consonants into *mutes* (plosives and nasals) and *liquids* (other consonants). Haldeman (1860: 83, 369) recognizes thirty-four vowel qualities, which he arranges in a dense A-shaped diagram, and he indicates vowel quantity with macrons and breves. Unlike Daniel Jones (1909) he does not propose a scheme in which the distinction between back [ɑ] and front [a] is crucial.

The concentration in this work is on Haldeman's Dhegiha-language data, although observations from his work on Caddo and Wichita will be added where relevant. (Unfortunately I lack sufficient modern lexical data to give as full an analysis with modern examples of the Caddo and Wichita data as I would wish.) Data from Haldeman's work are taken from Haldeman (1860), a corrected and book-length edition of Haldeman (1859). Haldeman divided his work into sections (often extremely short and usually corresponding to paragraphs), in addition to the book being paginated. Both modes of reference will be used here.

		labial. dental. sigmal. lingual. cerebral. palatal. guttural. faucal. laryngal.												
		§ 461-3 469 495 486 491 514 525 547 552												
INTERRUPTION	little	{ nasal	{ sonant	lenis 1	v, v	-	-	-	-	J, J	J, J	-	-	
				asper 2	-	-	-	-	-	-	-	-	-	
			{ LIQUIDS.	{ surd	lenis 3	-	-	-	-	-	-	-	-	-
					asper 4	-	-	-	-	-	-	-	-	-
		{ pure	{ sonant	lenis 5	v, v	l h r, r, r	l, l	-	J, J	-	-	-		
				asper 6	-	l?	-	-	-	-	-	-	-	
			{ surd	lenis 7	-	-	-	-	-	-	-	-	-	
				asper 8	v	l	r, r	-	J	J	5	-	h, d	
	much	{ nasal	{ sonant	lenis 1'	m	n	n	n	-	-	-	-		
				asper 2'	-	n	-	-	J, ?	§ 198	-	-	-	
			{ MUTES.	{ surd	lenis 3'	-	-	-	-	-	-	-	-	
					asper 4'	m	n	-	-	-	-	-	-	-
		{ pure	{ sonant	lenis 5'	b	d	d	d	-	G	-	-	-	
				asper 6'	b d	-	3	3	J	G	2	-	-	
			{ surd	lenis 7'	p	t	t	-	c	q	q	q	q	
				asper 8'	p f	-	s	s	f	c	q	q	q	

§ 490

Figure 1: A digest of consonantal symbols in Haldeman 1860: 121: §576

2 Haldeman the Americanist and his work on Dhegiha

In addition to a number of versions of the Lord's Prayer (including those in Cherokee and Wyandot) Haldeman (1860) provided data in the form of 75 cardinal numeral sets from 1–10 from a wide range of languages of Europe, Asia and North America (plus Grebo from Liberia). A number of these were Algonquian, Muskogean and Iroquoian languages in addition to numerals from Makah, Chinook, Comanche, Jicarilla Apache and the Yuman language 'Iipay Aa. Among the languages on which Haldeman tried out his spelling system are the Dhegiha Siouan language Kanza (for which he also provided some Santee parallels for certain forms from Riggs 1852; see Figure 3). He also provided data from the Caddoan languages Caddo (which Haldeman referred to as "Nadaco") and Wichita (referred to as "Waco" but identical with the Wichita recorded in the 20th and 21st centuries, for instance in Rood (1975). In each case the data presented are cardinal numerals from 1–10 and some additional lexicon (over 40 such items in the case of Caddo and 10 from Wichita), evidently recorded by Haldeman from native speakers and not previously listed elsewhere. Haldeman also collected the numerals from 1–10 in Osage; see Figures 2 and 3.

As Rankin (1994) showed, Max von Wied (zu Wied-Neuwied 1839–1841) had described sounds in various Dhegiha languages (Wied documented Omaha, Ponca, Kanza and Osage) quite well within the limitations of his annotated Franco-German spelling system. This means that though his work is superb for its time

711. <i>Kansa.</i>	712. (<i>Osage.*</i>)
¹ miéćtsɛ	¹ miɾtrɛ
² no·bá	² nò·mbă
³ diŋ·bli	³ là·brɪ
⁴ tò·bă	⁴ tò·bă
⁵ sŋ·tʊ	⁵ sà·tă
⁶ rápɛ	⁶ rà·pɛ
⁷ pè·õmɛ	⁷ pè·õmpvɔ, ò·mpă
⁸ pe·à·bli	⁸ cì·ăto·bă
⁹ rŋ·ce	⁹ cere·brɛtrɛɿʃcɟɛ
¹⁰ cədè·blɛ.	¹⁰ cere·brɛ.

Figure 2: Numeral data from Kanza and Osage (Haldeman 1860: 146, §711, 712)

KANSA (=Cən̄s̄n̄.)

634. *The vowel Y*, French *u*, is found here, although very rare in the aboriginal languages of North America. In our examples we add (in parentheses) the Dakota equivalents, but placing Riggs' diacrits *after* instead of over the letters, as *g'* (which is compared with *ghain*), *s'*, English *sh*; *h'*, 'a deep surd guttural'; *c'*, Eng. *tsh*; *z'* Eng. *dzh*; *n*, as in English *sing*, and French *bon*, the two being confounded after eighteen years study by a number of missionaries. Probably both sounds occur, as in Kansa.

<i>ear</i> ,	nɛ́tá (nog'e)	<i>forehead</i> ,	pìēsɛɛ (ité)
<i>eye</i> ,	urátəʃv̄ (is'tá)	<i>fan</i> ,	ĩcīlāje (ic'ádu)
<i>brow</i> ,	jrtáhurăbă (is'táh'e,	<i>pipe</i> ,	nönóbă (c'andúhupa,
	<i>eye-ridge</i> .)		c'andí, tobacco.)
<i>mouth</i> ,	ihă (i)	<i>knife</i> ,	mòhɛ (minná)
<i>tongue</i> ,	jéssɛ* (c'ez'í)	<i>warm</i> ,	mɛrtjèa'v
<i>nose</i> ,	pnh* (póg'e)	<i>leggings</i> ,	hy'ŋgă (hunská)
<i>nostril</i> ,	pŋrʊrɛ (póg'e-oh'dó-	<i>shirt</i> ,	ɔscóscöucdocudă (on-
	<i>ka</i> , nose-hole.)		h'doh-da.)

* Pronounce each *s*, and the *h*.

Figure 3: Lexicon from Kanza, with some Dakota parallels from Riggs (1852) (Haldeman 1860: 135, §634)

he missed many crucial details and failed to record other details consistently. Haldeman's system was theoretically more precise as far as it went (although there is little consistent coverage of tones and essentially none of consonants which are ingressive, velaric, or other kinds of clicks). But it was deployed less consistently and less accurately. His records of Kanza and Osage do show an ability to indicate primary stress using acute accents, while grave accents are used to indicate a variety of vowel qualities, short vowels are marked with breves, long vowels with postvocalic dots, and vowel nasalization is represented with the ogonek or Polish hook placed at the bottom of the line after the vowel.

Working on small amounts of material (often only the numerals from 1–10) from a large number of languages, Haldeman recognized that some sounds were problematic in terms of his descriptive criteria, as his discussion of the two ejectives Caddo /t'/ and Wichita /k'/ shows (Haldeman 1860: 99: §448; 131: §574). But he did not make the leap (as García 1760 had done for Coahuilteco) by discovering that what made these sounds distinctive from other speech sounds but similar to one another was their common possession of ejective quality, with the corollary that ejectives should be represented consistently. As a result he was unable to indicate the ejective quality of the final consonant in Caddo *wists'i* 'one'. In fact, Haldeman's attempts at transcribing Caddo (for instance Haldeman's <vátet'> for *waadat* 'earth', in which he fails to hear that the medial stop is voiced: Haldeman 1860: 135, §633) are scattershot enough to be unreliable. Even so he recognized that the Caddo word for 'cheek' used a dental or alveolar rather than a velar nasal.

His array of consonantal types was defective in other respects. Although Dhegiha languages contain ejectives, the small samples from Kanza and Osage which Haldeman cites happen not to include any of these sounds; Haldeman would probably have been unable to indicate these, as they are not provided for in his consonantal chart, and his encounters with them in Caddo and Wichita left him uncertain as to the nature and phonetic structure of the ejectives which he encountered there. He also lacked a consistent way of indicating the glottal stop, either initially, medially or finally, which is a special problem when recording Caddo data. Nor did Haldeman's system capture the three degrees of phonemic vowel length which are present in Wichita (although Haldeman 1860: 80, §353–355) provides the wherewithal to do this.

As a result of these and other shortcomings, Haldeman's work has received rather little attention from modern phonologists or indeed other linguists. Even Haldeman himself made no use of the system in his work on Pennsylvania German (Haldeman 1872). The discussion in Pilling (1887) and the brief account in

Kelly & Local (1989), written incidentally by the academics who taught phonetics to this author, are rare exceptions to this neglect.

Haldeman's data on Osage, comprising merely the cardinal numerals from 1 through 10, and the corresponding forms in Kanza, help us to get a better sense of his transcriptional techniques. Modern Osage data are from Quintero (2009) and Kanza data from Cumberland & Rankin (2012). Original transcriptional systems have been preserved. We note that the two languages, though very close, are represented differently in regard to orthographic conventions employed to indicate postalveolar sibilants, vowel length and nasalized vowels.

Dhegiha languages share a number of crosslinguistically marked features in their segmental phonology. These include the differentiation of nasalised from oral vowels, the differentiation of geminate and lengthened stops, of preaspirated and voiceless ejective stops, and the use of a high front rounded vowel. Modern forms are given below (Kanza <u> is /y/ and superscript <n> represents nasalization, indicated in Osage by an ogonek).

3 Modern counterparts of the data

In Tables 1 and 2 are given modern equivalents in Kanza and Osage for Haldeman's data in Figures 2 and 3.

Note that what are written as single plosives in the modern Kanza orthography are actually geminates, thus <k> is /kk/.

4 Remarks on the forms

The materials here represent examples of impressionistic phonetic transcriptions, which is what we would expect in a work from the pre-phonemic era. The Kanza and Osage words in Haldeman's material (especially the former) are recorded with comparatively greater detail than numerical data from some of the other languages are. Indeed the Kanza numerals are recorded with greater detail by Haldeman with respect to accent than they are in the present orthography. But the forms are not necessarily noted with greater accuracy, and neither system indicates the differences between the various voiceless stop series clearly. Tense stops in Kanza in Haldeman's transcription are represented by the use of bold consonantal characters, so that Haldeman's <p> is [p ~ ph], <p> is [pp] while <'p> is [hp] in his Kanza work. (This fact is clearer in the version of Haldeman's work published in the *Transactions of the American Philosophical Society* than in

Table 1: Cardinal Numerals (Haldeman 1860: §711, 712)

	Kanza	Osage
1	mi ⁿ xci	wixce
2	no ⁿ bá	ǫǫpa
3	yábli ⁿ	ǫáabrii
4	dóba	tóopa
5	sáta ⁿ	sáhta
6	shápe	šáhpe
7	péyo ⁿ ba	hpéeǫǫpa
8	kiadóba	hkietóopa
9	shá ⁿ ka	lébraǵ hce wǵke
10	glébla	lébraǵ

Table 2: Additional Kanza lexicon (Haldeman 1860: §634)

	Kanza
ear	na ⁿ tá
eye	ishtá (note ishtá toho ‘iris’ and ishtáka ⁿ ha ‘eyelid’)
brow	ishtáhin
mouth	i (Haldeman’s form iha is ‘mouth-skin’ or ‘lips’)
tongue	léze
nose	pa
nostril	pa xlóge
forehead	pe
fan	ijéayuzúbe (fan hung over baby’s face)
pipe	nannónba
knife	mánhín
warm	moshcé
leggings [sic]	húyuyinge
shirt	ókiloxla

the acid-heavy and aged brown paper of the version of Haldeman 1860 available from archive.org.)

The forms are in general readily identifiable from recording of the languages over a century later, as the references from the Kanza and Osage dictionaries show (Cumberland & Rankin 2012 for Kanza, and Quintero 2009 for Osage). The few differences are instructive.

Most interesting in this regard are the numerals, especially ‘nine’ and ‘ten’. In Osage ‘nine’ is a subtractive compound (‘ten lacking one’) involving ‘ten’ and an allomorph of ‘one’. But Kanza uses the widespread form, possibly reconstructible as *kišqkka*, which is recorded for several Mississippi Valley and Ohio Valley Siouan, Muskogean and Great Lakes Algonquian languages. Modern Osage has simplified the onset of ‘ten’, though Haldeman had what would nowadays be represented as /kar-/ (or maybe /gar-/; his depiction of voicing is not always trustworthy). The form in Dhegiha has irregular reflexes elsewhere in Dhegiha: Omaha-Ponca *gthéba*,¹ where <th> is /ð/, has lost the liquid found in the second syllable in other Dhegiha languages and in earlier records of Omaha-Ponca (compare Quapaw *kdébnq*; Rankin 1982: 3). The glide which separates the prefix from the form for ‘three’ in Kanza ‘eight’ has been apprehended by Haldeman as a front vowel, although the hiatus in the corresponding Osage form has been recognized by Haldeman as such.

Both the Kanza and Osage forms in Haldeman’s work include forms of what was originally the enclitic *-xi* ‘only’ at the end of the form for ONE, and this pan-Dhegiha word is a form which was later borrowed into Caddo as *wists’i*. Note also the initial [di-] in Kanza ‘three’, now replaced by /j-/ <y>, and the fact that Haldeman did not notice the nasalization of the vowel in the first syllable of Kanza ‘two’. The form ‘eight’ in Haldeman’s Osage is reflected in the modern language, in modern Kanza and (as a loan, namely *kiyátaw*; Rood 1996:608) in modern Wichita. But the earlier form for ‘eight’ based on ‘three’ is used in Haldeman’s Kanza as a parallel to the form for ‘seven’ (itself a compound involving ‘two’). Primary stress and vowel length and nasalization are well represented in Haldeman’s work, especially for Osage.

Of the nouns in Haldeman’s record of Kanza, most are similar to their modern counterparts. For the rest, if one allows for a modicum of close phonetic detail (for instance the realization of /a/ as a low rounded vowel in ‘nose’), the quality of transcription is rather high. ‘Eyebrow’ may end in a form of *sábe* ‘black’ but this is uncertain, while material which is less easy to identify is attached to the end of ‘eye’ and ‘shirt’. The occasional weakness in Haldeman’s powers of perception

¹ <http://omahalanguage.unl.edu/dictionary/>

is seen in the fact that the consonantal sounds in the second part of ‘nostril’ are represented in Haldeman’s work by his symbol for /ʃ/, while the initial consonant of ‘tongue’ has changed in the 120 or so years between Haldeman’s work and Bob Rankin’s. ‘Warm’ seems to include an enclitic, which may be the masculine declarative enclitic (*ey*)*ao*. Haldeman’s remarks about the phonetics of ‘nose’ and ‘tongue’ are somewhat surprising, as modern Kanza does not permit [h] in coda position and does not use geminate consonants.

5 Conclusion

Data on Haldeman’s recording of Dhegiha languages have been presented and the success or otherwise of Haldeman’s system in coping with the segmental phonology of these languages, especially the complex consonantal systems, has been evaluated. Haldeman’s ability correctly to hear the phonetic features of a language seems to have varied in competence from one language to another. Although his Kanza and Osage data are the most accurately recorded Dhegiha data of their time (and although very little else was available for Kanza when Haldeman’s data appeared), his transcription is still far from adequate. This is possibly the result of his imperception of certain sounds. Nonetheless the transcriptions list some forms which differ in phonological shape or sense from the modern forms of these words, and as such they have some historical significance.

Acknowledgment

I first heard of Robert L. Rankin’s Siouan work in the 1980s and grew to know it better in the course of the following decade, thanks to his generosity and that of Dave Costa, which I eagerly acknowledge. Bob’s example of someone switching linguistic fields and taking the opportunity to document languages before they passed completely out of existence (which he accomplished at a time before language endangerment was regarded as an important concern) impressed me greatly, as did his use of philological sources. Having presented a paper at the Siouan-Caddoan Conference I was lucky enough to have dinner with him and Giulia Oliverio at the SSILA Meeting in Albuquerque in 1995, where he was kindly, erudite and hilarious company. The study of Native American language is so much the poorer for his passing.

References

- Cumberland, Linda A. & Robert L. Rankin. 2012. *Kaá'ze íe wayáje: An annotated dictionary of Kaw (Kanza)*. Kaw City, OK: Kaw Nation.
- García, Bartolomé. 1760. *Manual para administrar los santos sacramentos de penitencia, eucaristia, extremaunción, y matrimonio, dar gracias después de comulgar, y ayudar a bien morir a los indios de las naciones pajalates, orejones, pacaos, pacóas, tilijayas, alasapas, pausanes y otras muchas diferentes, que se hallan en las Misiones del Río de San Antonio, y Río Grande, pertenecientes a el Colegio de la Santísima Cruz de la Ciudad de Querétaro, como son: Los pacuaches, mescales, pampopas, tacames, chayopines, venados, pamaques, y toda la juventud de pi-huiques, borrados, sanipaos, y manos de perro*. Mexico City: Imprenta de los herederos de Doña María de Rivera.
- Haldeman, Samuel Stehman. 1859. Analytic orthography: An investigation of the sounds of the voice, and their alphabetic notation. *Transactions of the American Philosophical Society* 11. 259–401.
- Haldeman, Samuel Stehman. 1860. *Analytic orthography*. Philadelphia: J. B. Lippincott & Company.
- Haldeman, Samuel Stehman. 1872. *Pennsylvania Dutch, a dialect of South German with an infusion of English*. London: Nicholas Trübner & Company.
- Jones, Daniel. 1909. *The pronunciation of English*. Cambridge: Cambridge University Press.
- Kelly, John & John Local. 1989. *Doing phonology: Observing, recording, interpreting*. Manchester: Manchester University Press.
- Lepsius, Carl Richard. 1863. *Standard alphabet for reducing unwritten languages and foreign graphic systems to a uniform orthography in European letters*. 2nd edn. London: Williams & Norgate.
- Lesley, J. Peter. 1886. Memoir of Samuel Stedman Haldeman, 1812–1880. *Biographical Memoirs of the National Academy of Sciences* 2. 139–172.
- Pilling, James Constantine. 1887. *Bibliography of the Siouan languages* (Bureau of American Ethnology Bulletin 5). Washington: Government Printing Office.
- Quintero, Carolyn. 2009. *Osage dictionary*. Norman: University of Oklahoma Press.
- Rankin, Robert L. 1982. A Quapaw vocabulary. *Kansas Working Papers in Linguistics* 7. 125–152.
- Rankin, Robert L. 1994. Notes on the Kansa word list of Maximilian, Prince of Wied. *Kansas Working Papers in Linguistics* 19(2). 201–210.

- Riggs, Mary Ann Clark. 1852. *An English and Dakota vocabulary*. New York: R. Craighead.
- Rood, David S. 1975. *Wichita grammar*. New York: Garland Publishing.
- Rood, David S. 1996. Sketch of Wichita, a Caddoan language. In William C. Sturtevant & Ives Goddard (eds.), *Languages* (Handbook of North American Indians 17), 580–608. Washington: Smithsonian Institution.
- zu Wied-Neuwied, Maximilian Alexander Philipp. 1839–1841. *Reise in das innere Nord-America in den Jahren 1832 bis 1834: 2 Textbände und 1 Bildband mit Illustrationen von Karl Bodmer*. Koblenz: Verlag J. Hölscher.

